

REMARKS

The Office Action of February 11, 2003 has been carefully reviewed. No claim is allowed. Claim 1 presently appear in this application and defines patentable subject matter warranting its allowance. Reconsideration and allowance are hereby respectfully solicited.

Claim 1 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention. The Examiner states that claim 1 is indefinite in the recitation "similar but not identical to SEQ ID NO:1" and further in the recitation of "DNA which hybridizes". It is believed that this rejection is obviated by the claim amendments. Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 1 has been rejected under 35 U.S.C. §112, first paragraph, because the examiner states that the specification, while being enabling for the enzyme of SEQ ID NO:1 or enzymes encoded by genes which will hybridize to SEQ ID NO:2 under specific conditions, does not reasonably provide enablement for any enzyme with the claimed properties. This rejection is respectfully traversed.

The applicants' contentions are that the claimed recombinant thermostable enzyme can readily be obtained by a skilled artisan following the guidance disclosed in the

specification. Said specification discloses how to prepare the recombinant thermostable enzyme at pages 19-24, 26-27, and 36-39. This enzyme can easily be obtained by selecting the target enzyme having the physicochemical properties defined in claim 1 from various candidates and further selecting by deleting, replacing, and/or adding one or more amino acid residues with regard to the amino acid sequence of SEQ ID NO:1. Because the amino acid of SEQ ID NO: 1 is disclosed in the instant application and the physicochemical properties of the claimed recombinant thermostable enzyme are clearly recited in claim 1, the applicants believe that further information about which amino acid residues in SEQ ID NO: 1 can be deleted, replaced, or added is not necessary.

Due to the fact that such "action" as recited in claim 1 performed by the claimed recombinant thermostable enzyme is very unique, it is possible for any person of skill in the art to screen out various polypeptides by determining if they have this specific "action". After that, the physicochemical properties (2)-(5) as recited in claim 1 would lead a person of skill in the art to the claimed enzyme. The amino acid sequence of (6) is an index which determines the claimed enzyme at the DNA level. A skilled person can obtain the claimed enzyme easily according to the steps as mentioned above. It is therefore believed that the specification does reasonably provide enablement for an enzyme with the recited properties.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

In view of the above, the claim defines patentable subject matter warranting their allowance. Favorable consideration and early allowance are earnestly urged.

Respectfully submitted,

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